

# **The Zimbabwe mother-to-child HIV transmission prevention project**

## **Situation Analysis**

**Government of Zimbabwe  
Ministry of Health and Child Welfare**

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## **Dedication**

To the 55,000+ HIV infected Zimbabwean pregnant women, who, unaware of their HIV positive status, each year go through the excitement and tribulations of pregnancy, the trials, pain and joy of delivery, and the event filled testing process of raising their lovely children, only to then go through the in-describable harrowing painful experience of watching their children suffer and subsequently die from HIV/AIDS at a tender age. It is hoped that this work will provide the first step towards preventing this tragedy.

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## Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ACT	Aids Care Trust
ANC	Antenatal Care
ARI	Acute Respiratory Infection
ARM	Artificial Rupture of Membranes
ARV	Anti-retroviral
ASO	Aids Service Organisation
AZT	Zidovudine
BCH	Bulawayo City Health
CADEC	Catholic Development Centre
CDC	Centres for Disease Control and Prevention
CI	Confidence Interval
CMH	Chitungwiza Municipal Health
CMR	Child Mortality Rate
CONNECT	Institute of Systemic Counselling
CSO	Central Statistical Office
CYP	Couple Years of Protection
ELISA	Enzyme-linked-immunosorbent Assay
ESAP	Economic Structural Adjustment Programme
FP	Family Planning
Hb	Haemoglobin
HCH	Harare City Health
HIV	Human Immunodeficiency Virus
HIV+	HIV positive
IMR	Infant Mortality Rate
KAP	Knowledge Attitudes and Practices
MAC	Matabeleland Aids Council
MCH	Maternal and Child Health
MMR	Maternal Mortality Rate
MMWR	Mortality and Morbidity Weekly Report
M-t-C	Maternal to Child
NACP	National Aids Coordination Programme
NGO	Non Governmental Organisation
ORS	Oral Rehydration Solution
PACT	Paediatric AIDS Clinical Trials Group
PHL	Public Health Laboratory
PLWHIV	People Living With HIV
PMR	Perinatal Mortality Rate
PNC	Postnatal Care
SRN	State Registered Nurse
TT	Tetanus Toxoid
RGN	Registered General Nurse
RPR	Rapid Plasma Reagin
SBCUS	Sexual Behaviour and Condom Use Survey
SBR	Still Birth Rate
SDA	Seventh Day Adventists
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
TF	Task Force

UNAIDS	Joint United National Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
USA	United States of America
VCCT	Voluntary Confidential and Counselling Testing
WHO	World Health Organisation
ZAOGA	Zimbabwe Assemblies of God Africa
ZCC	Zimbabwe Council of Churches
ZDHS	Zimbabwe Demographic and Health Survey
ZDV	Zidovudine
ZIM	Zimbabwe
ZNFPCC	Zimbabwe National Family Planning Council
ZNHP	Zimbabwe National Health Profile



# **1. Introduction and background**

Zimbabwe is one of the five countries worst affected by the HIV/AIDS pandemic in the whole world (WHO, 1997). As part of continuing strategies for dealing with the epidemic, the Ministry of Health in Zimbabwe established the Mother To Child Transmission National Task Force (MTCT/TF) to spearhead planning and implementation of interventions to reduce mother to child (M-t-C) transmission. In this regard, a model was prepared for the Task Force (TF) by one its members with assistance of UNICEF and UNAIDS Geneva staff (Chipato, 1997). With the model as a working document, the present situation analysis was commissioned to provide background information for the development of the MTCT/TF project proposal to be conducted in three pilot clinic sites in Harare City (Highfield Clinic), Chitungwiza (Zengeza) and Bulawayo City (Pelandaba Clinic).

The project purposes are:

- to develop comprehensive strategies to reduce M-t-C HIV transmission in Zimbabwe;
- to develop and strengthen partnerships at the national, district and local levels which will support and sustain efforts to reduce M-t-C HIV transmission in Zimbabwe; and
- to identify a model intervention which is feasible for implementation at the national levels which can also be replicated in other countries.

The specific objectives of the project are:

- to make available HIV voluntary and confidential counselling and testing (VCCT) to all pregnant women participating in this project so that they may make fully informed decisions; and
- to determine the feasibility of administering a short-course drug regimen for HIV positive pregnant women to reduce M-t-C HIV transmission.

The situation analysis will present the national and pilot site demographic and health profiles and the status of the reproductive health and voluntary counselling and testing services. The socio-cultural context of HIV/AIDS and the potential for partnerships will be evaluated and presented. Where information on pilot clinic site catchment areas is unavailable, only data on the whole city will be presented.

## **2. Methodology**

The two main sources of data for this situation analysis were review of literature, review of clinic patient/staff records and key informant interviews. Published and unpublished documents including annual reports were collected from libraries, Ministry of Health and Child Welfare and Health Departments of the 3 cities involved in the project (Harare, Bulawayo and Chitungwiza). 1992 Census documents were also reviewed. Some data abstracted were presented as it was, while others were recalculated and presentation re-formatted for this document. Key informants interviewed from the City/Municipality Health departments included the 2 City Health Directors, 1 Deputy City Health Director, City/Municipal Health Programme Officers, AIDS co-ordinators, Matrons/Sisters-in-Charge of pilot site clinics and their counterpart Community Health Sisters, an HIV/AIDS counsellor and nurses from the pilot site clinics. National AIDS Co-ordination Programme (NACP) officers, the UNAIDS country programme officer and programme officers of AIDS Service Organisations were also interviewed.

## 3. Findings

### 3.1. Demographic Profile

#### 3.1.1. Population distribution

Zimbabwe has a projected population of 12.5 million people in 1998 based on the 1992 population Census (Central Statistical Office, 1992; Table 1). Forty-five percent of the population ( 5.6 million) is under the age of 15, while 15% (1.9 million) is under five years of age. Women in the child-bearing age group (15-49 years) are estimated to constitute 23% of the population ( 2.9 million) while pregnant women constitute 4.4% (0.6 million). The expected number of births is 1.1 million, estimated at 8.9% of the population.

A quarter of the Zimbabwe population lives in urban areas, with over 50% of this urban population resident in Bulawayo, Harare and Chitungwiza (Table 1).

**Table 1. Population distribution by city by demographic group: 1998**

<b>Population</b>	<b>Harare (%)</b>	<b>Chitungwiza (%)</b>	<b>Bulawayo (%)</b>	<b>National (%)</b>
Total	1,473,608 (100)	327,397 (100)	753,702 (100)	12,519,524 (100)
< 5 years	200,411 (13.6)	46,818 (14.3)	98,735 (13.1)	1,877,929 (15.0)
<15 years	518,710 (35.2)	127,030 (38.8)	267,564 (35.5)	5,621,266 (44.9)
Women 15-49	409,663 (27.8)	92,653 (28.3)	198,224 (26.3)	2,892,010 (23.1)
Pregnant women	60,418 (4.1)	13,423 (4.1)	33,163 (4.4)	550,859 (4.4)
Expected births	65,076 (8.9)	14,569 (8.9)	33,540 (8.9)	557,119 (8.9)

*Note:* Percentages by age groups in parentheses

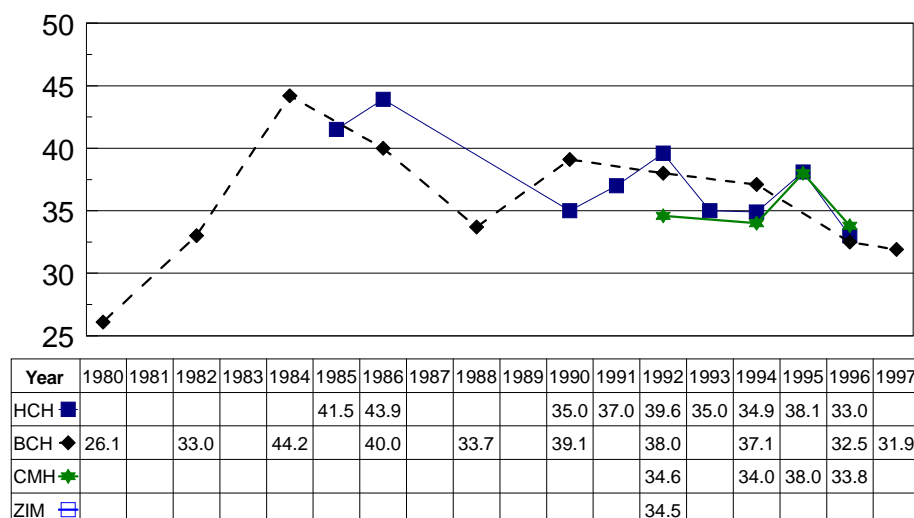
Source: Projected from 1992 Census

#### 3.1.2. Birth rates

The crude birth rates for the 3 cities are having a downward trend, and are now around 32 per thousand (Fig. 1). This is a reflection of the Total Fertility Rate (average number of children born in a woman's lifetime) that has gone down from 6.5 in 1984 to 4.3 in 1994 (ZDHS, 1994) and an all time high contraceptive user rate of 48% (Population Reference Bureau, 1997 & ZDHS, 1994).

**Fig. 1. Crude Birth Rates by City: 1980 - 1997**

Births per 1,000 population



Data Source: Census 1992 Provincial and National Profiles  
 Harare City Health Annual Reports, 1986-1996  
 Bulawayo City Health Annual Reports, 1984 and 1995  
 Chitungwiza Municipal Health Annual Reports, 1994 -95

### 3.1.3. Socio-economic status

Data on socio-economic status are hard to come by, but reasonable proxy measures found in the 1992 Census reports include economic activity and education status. Few figures are available for the 15-49 year age-groups, and therefore the 15 years and above were used in some instances to estimate the status of the 15-49 year age group. In the 1992 Census, economic activity was defined as activity leading to production of goods and services for income in cash or in kind. The economically active population therefore included paid employees and employers, unpaid family workers, own account workers and those unemployed while the economically inactive included homemakers, those studying, the sick and the old. It should however be noted that most women tend to report that they are homemakers even though they combine housework with other economically productive activities. Table 3 shows the levels of economic activity for Harare Province (including Harare City, Harare Rural and Chitungwiza) and Bulawayo as calculated from 1992 census data.

**Table 2. Levels of economic activity for Harare and Bulawayo men and women (15 years and above)**

Area	Gender	Economically Active		Economically Inactive
		<i>Employed</i>	<i>Unemployed</i>	
Harare	Women	32%	12%	56%
	Men	69%	15%	16%
Bulawayo	Women	54%	12%	34%
	Men	86%	8%	6%

Data Source: Census 1992, Harare and Bulawayo Provincial Profiles  
 Table compiled by the author

In all cases, a higher proportion of men are economically active than women, and this difference is largely among the employed. Higher proportions of women are economically inactive. Between the two urban groupings, Harare has higher proportions of economically inactive persons while Bulawayo has relatively more employed persons.

#### 3.1.4. Literacy

The population aged at least 15 years who had completed at least grade 3 were classified as literate for the 1992 Population Census. Table 3 shows the literacy rates for populations age 15 years and above by sex for Harare, Chitungwiza and Bulawayo.

**Table 3. Literacy Rates (percents) for Population aged 15+ by sex for Harare, Chitungwiza and Bulawayo**

Area	Gender	
	<i>Female</i>	<i>Male</i>
Harare Urban	93.10	94.94
Chitungwiza	92.86	96.20
Bulawayo	92.53	94.74
National	75.12	86.06

Source: Census 1992, Harare and Bulawayo Provincial Profiles

Female literacy rates are around 93% for the three cities, though they are slightly lower than those for males. As expected, they are much higher than the national rates, reflecting on the known rural-urban difference.

#### 3.1.5. Marital status

In both Harare and Bulawayo, most women are married, and over one-third were never married. There are relatively more married women in Harare and conversely more women who were never married. The other proportions are quite similar.

**Table 4. Percentage distribution 15 years and over women by Marital Status for Harare and Bulawayo, 1992**

Marital status	Area	
	Harare	Bulawayo
Never Married	32.7	40.2
Married	57.0	51.1
Divorced/Separated	8.2	6.8
Widowed	2.1	1.9

Data Source: Census 1992, Harare and Bulawayo Provincial Profiles

Table compiled by the author

## 3.2. Mortality

Indicators on mortality should ideally be computed directly from data on registered deaths relating to a particular period and the total population exposed to the population exposed to the risk of dying during the same period. Unfortunately registration of deaths in Zimbabwe is very incomplete, and indicators computed from these figures are therefore inaccurate. Reported figures from the City/Municipal Health

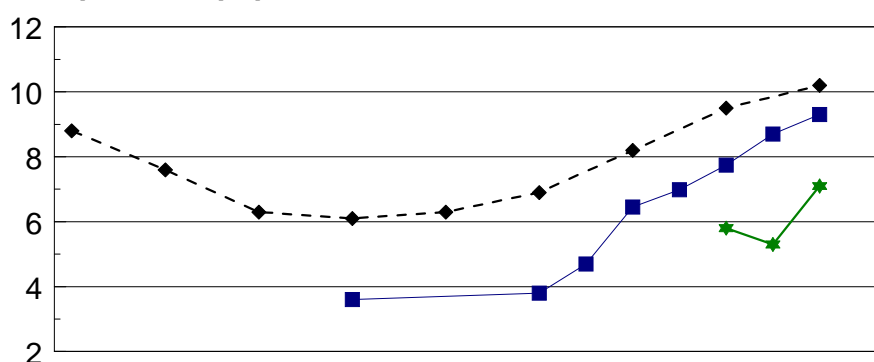
Departments are available and used, even though their accuracy may be debatable. Estimates derived from the 1992 Census are also presented, especially for national indicators.

### 3.2.1. Crude Death Rates

The Crude Death Rate (CDR) is the number of deaths per 1,000 population in a given period (usually a year). It has been going up in all the cities since the early 1980's, and as seen for Bulawayo, the rate is now very similar to the 1980 one (Fig. 2). The gains made in reducing CDR with the improved health service in Zimbabwe since the 1980's have all been reversed by the HIV/AIDS epidemic.

**Fig. 2. Crude Death Rates by City: 1980 - 1997**

Deaths per 1,000 population



Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
HCH							3.60				3.80	4.70	6.45	6.99	7.75	8.70	9.30	
BCH	8.80		7.60		6.30		6.10		6.30		6.90		8.20		9.50		10.20	
CMH															5.80	5.30	7.10	

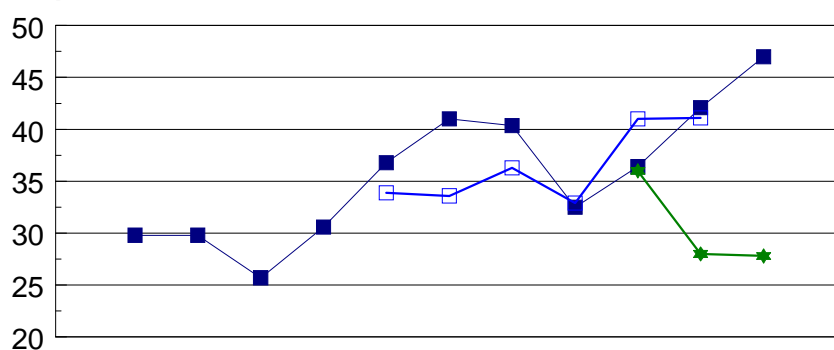
Data Source: Census 1992 Provincial and National Profiles  
Harare City Health Annual Reports, 1986-1996  
Bulawayo City Health Annual Reports, 1984 and 1995  
Chitungwiza Municipal Health Annual Reports, 1994 -95

### 3.2.2. Perinatal Mortality

Perinatal mortality rate (PMR) is an indicator that measures the quality of health care given to the mother and baby just before, during and just after delivery. It is the number of all births (including still births) under 7 days of age per 1,000 births (including still births). Population-based PMRs are not easily obtainable, especially at national level. Most available PMRs are based on health facility reported deaths, and they tend to under-estimate the real PMR. Since only these are available, they have been used. The available rates for the cities show PMRs going up (Fig. 3). Harare's PMR has almost doubled from 29.8/1,000 live births in 1986 to 42.1/1,000 in 1995, with the National figure having a similar trend. No data is available for Bulawayo, but available figures for Chitungwiza actually indicate a downward trend, a possible anomaly. The increase in PMR in Harare and at national level may not only indicate the impact of the HIV/AIDS epidemic, but may also be indicating the deteriorating health delivery system in general.

**Fig. 3. Perinatal Mortality Rates by City: 1985 - 1996**

Deaths per 1,000 live births



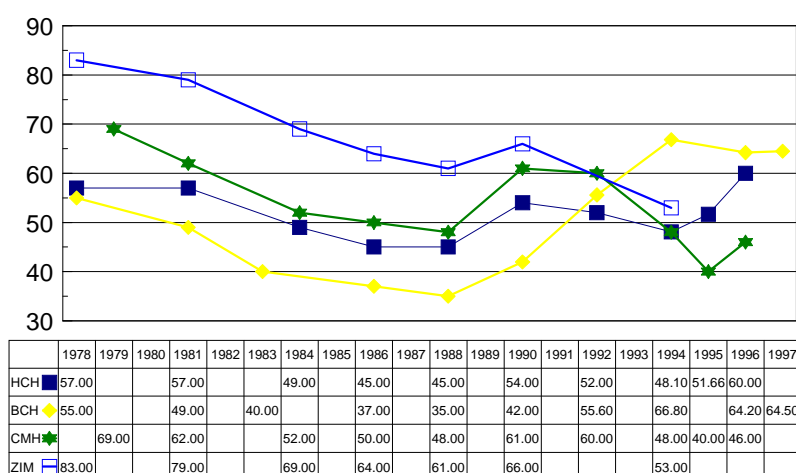
Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
HCH		29.80	29.80	25.70	30.60	36.80	41.00	40.36	32.50	36.40	42.10	47.00	
BCH													
CMH										36.00	28.00	27.80	
ZIM						33.90	33.60	36.30	32.90	41.00	41.10		

Source: Harare City Health Annual Reports (1985 - 1996)  
 Bulawayo City Health Annual Reports, 1984 & 1995  
 Chitungwiza Municipal Health Annual Reports, 1994 - 1996  
 Zimbabwe National Health Profile, 1995

### 3.2.3. Infant mortality

The infant mortality rate (IMR) measures the general socio-economic and health development of a community. Specifically, it is the number of children dying before they celebrate their first birthday out of 1,000 born alive. The dramatic reduction in the IMRs of all the cities and the nation by about a third between 1978 and 1986 is clearly demonstrated in Fig. 4. The IMRs went up in all areas around 1990, went slightly down but are on the way up again in Harare and Chitungwiza. The Bulawayo IMR trend is however slightly different in that even though it experienced the same downward trend as the others, its rate was the lowest and it hit an all time low of 35 per 1,000 live births in 1988. It then rose steeply thereafter to a high of 66.8/1,000 in 1994 and then stabilised thereafter. One can see the clear impact of an improved health delivery system, socio-economic and other factors in the early 1980's clearly demonstrated in these trends and the reversal in the late '80s and early '90s. The HIV/AIDS epidemic is most probably a major contributor to these changes, especially the definite reversal of the gains made in reducing IMR in the country. The introduction of the Economic Structural Adjustment Programme (ESAP) and the accompanying payment for health services is also widely believed to have had its own contribution, in addition to the recurrent droughts that have been experienced.

**Fig. 4. Infant Mortality Rates by City: 1978 - 1996**

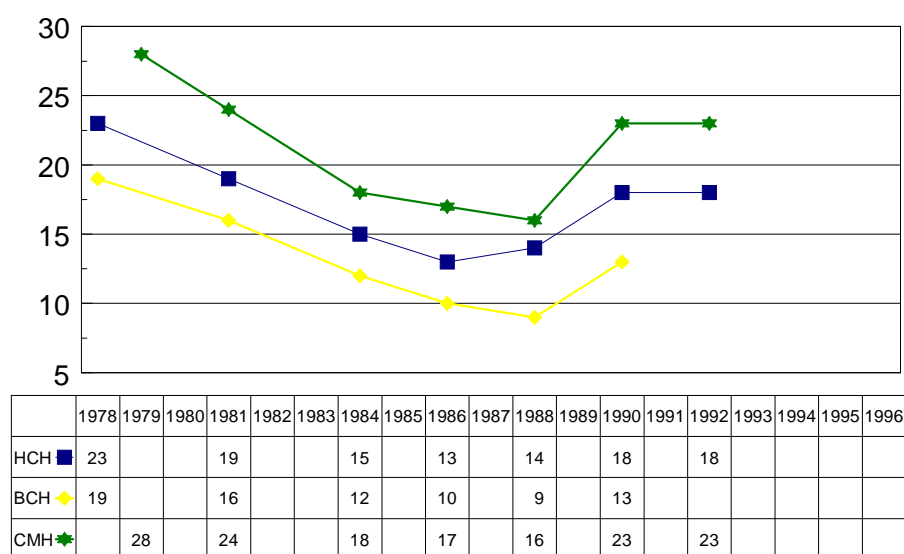


Source: Harare City Health (HCH) data for 1978 - 1992: 1992 Provincial Census Profile  
HCH data for 1993 - 1996: Harare City Health Annual Reports (1991 - 1996)  
Bulawayo City Health (BCH) data for 1978 - 1992: 1992 Provincial Census Profile  
BCH data for 1993 - 1996: BCH Annual Reports 1993- 1996  
Chitungwiza Municipal Health (CMH) data, 1978-92: 1992 Provincial Census Profile  
CMH data, 1993-96: CMH Annual Reports (1993-96)  
National (ZIM) data: Zimbabwe National Health Profile, 1995 & 1992 Census

### 3.2.4. Child Mortality

Child mortality rate (CMR) measures the mortality for children aged 1 - 4 years and is defined as the number of deaths of children in this age-group per 1,000 children of the same age group. The trend in CMR for the cities is very similar to that of IMR (Fig. 5). The dramatic fall in the early '80s followed by stabilisation between 1986 and 1988 then a rise is again clear. No reliable figures are however available after the 1992 Census.

**Fig. 5. Child Mortality Rates by city: 1978 - 1996**



Source: Census Provincial Profiles, 1992

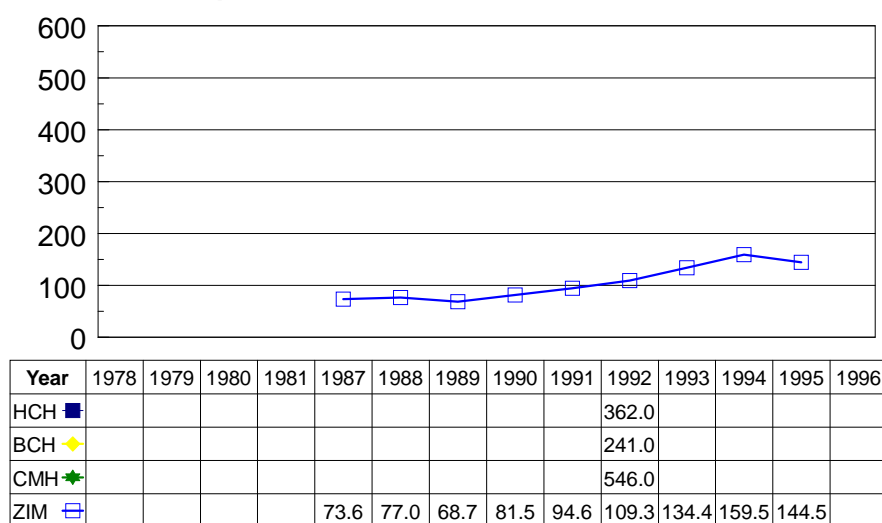


### 3.2.5. Maternal mortality

Maternal mortality ratio (MMR) relates to deaths of females in the age 15-49 years during the time of pregnancy or childbirth as well as deaths within 42 days of a delivery per 100,000 live births. MMRs ranging from 241/100,000 live births in Harare to 546/100,000 live births in Chitungwiza for the 3 cities were estimated during the 1992 Census. A community based study had however been carried out in Harare and a rural area, Masvingo, between in 1989-90, giving an MMR of 85 per 100,000 live births for Harare and 168 per 100,000 for the rural area (Mbizvo, 1994). It is therefore very difficult to know the trend of MMR. Reported National data, which are clearly gross under-estimates however indicate doubling of the health facility reported MMR from 73.6 per 100,000 in 1987 to 144.5 per 100,00 live births in 1995 (Zimbabwe National Health Profile, 1995). The hospital-based data does therefore suggest that maternal mortality is rising. The community-based maternal mortality study mentioned earlier showed that 18% (11) of 66 maternal deaths identified in Harare in their study was attributable to clinical AIDS compared to 7% of the 106 maternal deaths found in the rural setting of Masvingo. This shows that HIV/AIDS epidemic has had a significant contribution to the apparent increase in MMR, along with factors like ESAP and the accompanying reduced access to health services.

**Fig. 6. Maternal Mortality by City and nation: 1978 - 1996**

**Maternal deaths per 100,000 live births**

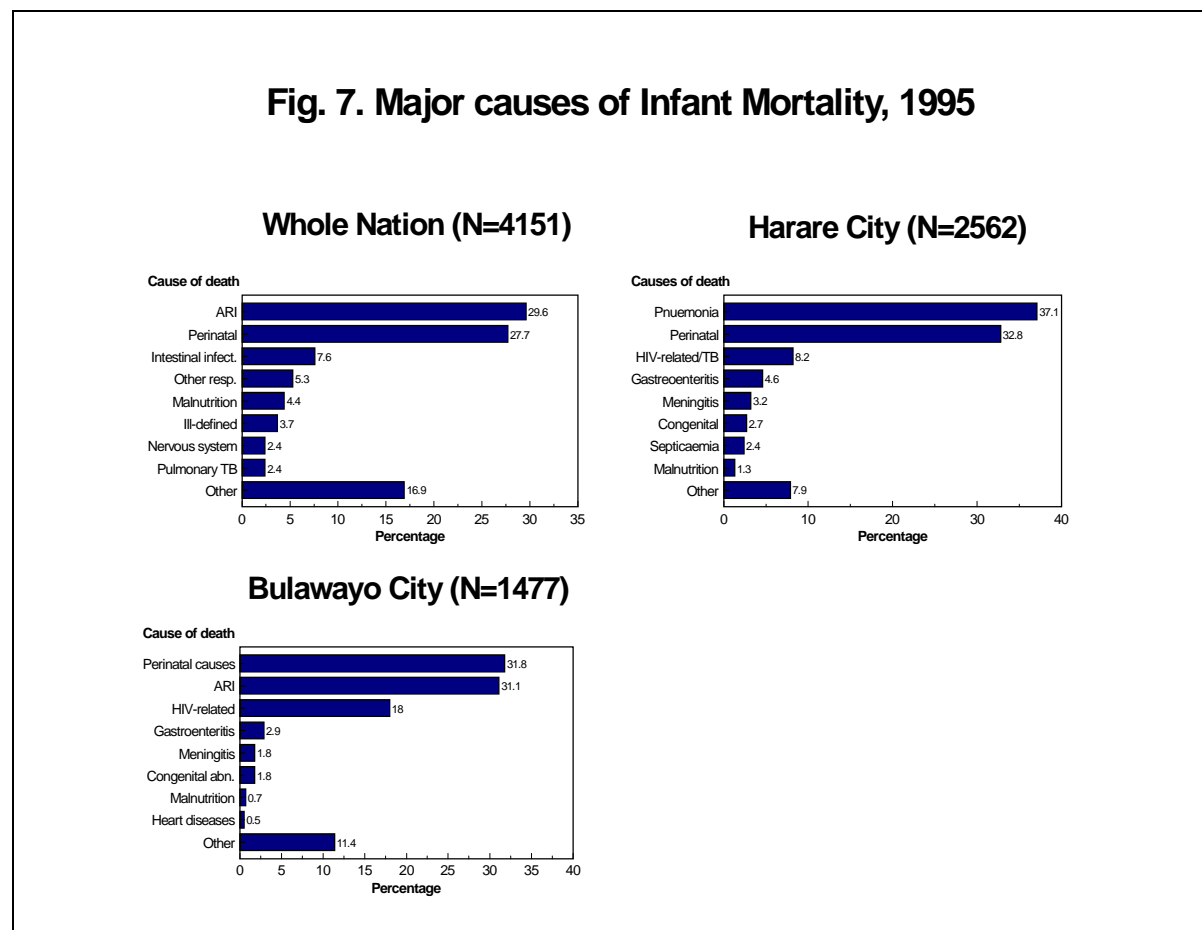


Source: Data for cities: Census Provincial Profiles, 1992

Zimbabwe data (ZIM): Zimbabwe National Health Profile, 1995

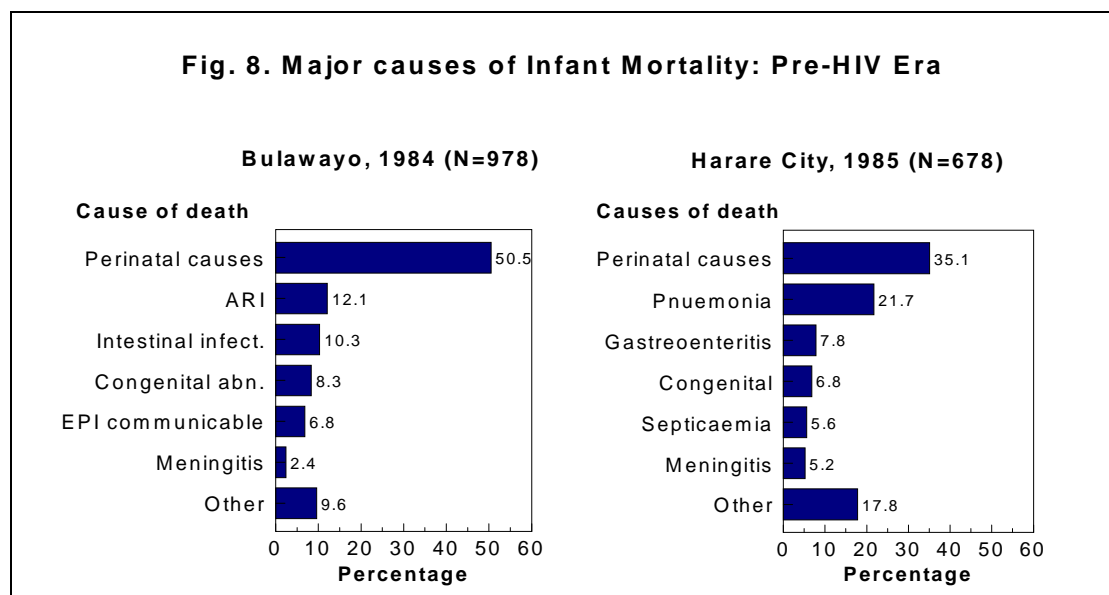
### 3.2.6. Causes of mortality

The causes of mortality can improve our understanding of the impact of the HIV/AIDS on mortality. Perinatal conditions top the list of major causes of mortality among the infants in 1995 (Fig. 7). Acute respiratory infections, malnutrition (sometimes confused with failure-to-thrive) and gastro-enteritis are all known presentations of HIV disease in infants. Fig. 7 shows that beside perinatal causes, these are the major contributors to infant mortality, pointing to HIV/AIDS as a possible major contributory factor to the rising infant mortality. Fig. 8 shows the causes of infant mortality for the available data of Harare and Bulawayo. It is very clear that Pneumonia/Acute Respiratory Infections (ARI), HIV-related diseases and TB now contribute much more to infant mortality than they did in the pre-HIV/AIDS era (before 1986).



Source: Harare City Health Annual Report, 1995  
 Bulawayo City Health Annual Report, 1995  
 Zimbabwe National Health Profile, 1995

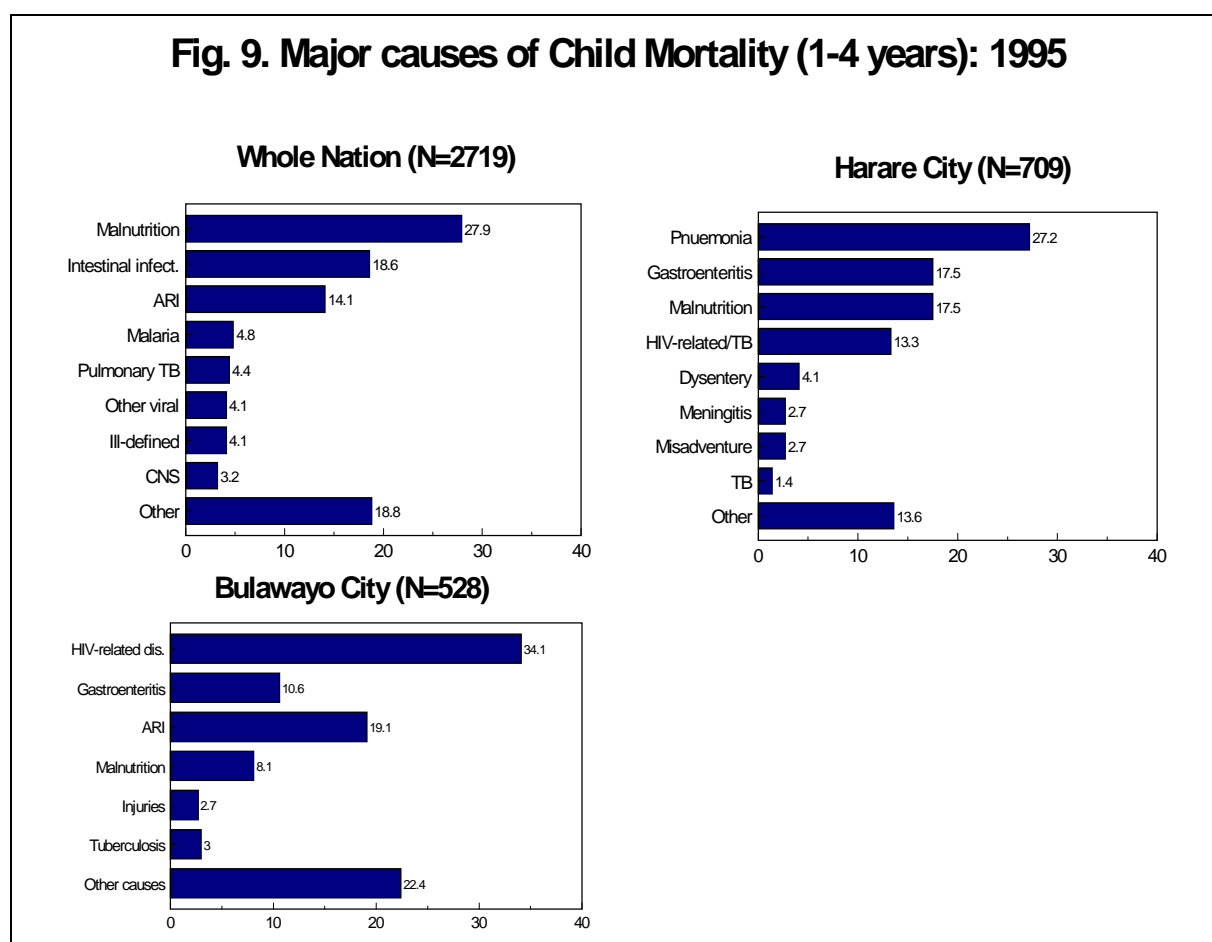
**Fig. 8. Major causes of Infant Mortality: Pre-HIV Era**



Data Source: Harare City - HCH Department Annual Report, 1986  
Bulawayo City - BCH Department Annual Report, 1984

Fig. 9 also shows the major causes of child mortality and again illustrates the large contribution of diseases that may have HIV as underlying cause. These include chest infections, gastro-enteritis, HIV-related diseases, TB, and gastro-enteritis.

**Fig. 9. Major causes of Child Mortality (1-4 years): 1995**



Data Source: Zimbabwe National Health Profile, 1995  
Harare City Health Annual Report, 1995  
Bulawayo City Health Annual Report, 1995  
Data reorganised and graph drawn by author

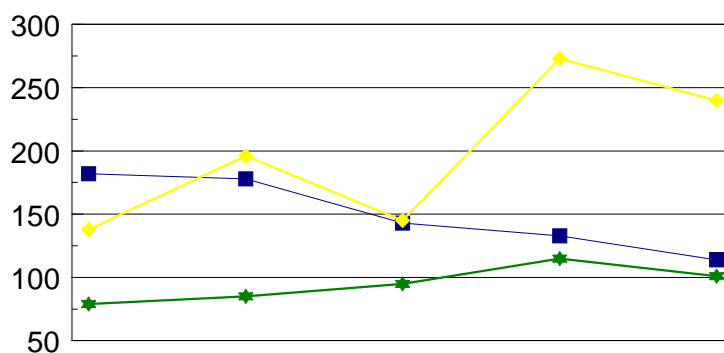
### 3.3. Epidemiological Profile of HIV/AIDS and related conditions

#### 3.3.1. AIDS Case trends

Since reporting started in 1987, 63,937 AIDS cases have been reported to the NACP by the end of 1996. Harare (including Chitungwiza) contributed 18% (11,619) of this cumulative figure while Bulawayo contributed 12% (7,469). It is known that these figures are only a tip of the iceberg as many cases go unreported. It is estimated that more than 250,000 AIDS cases have occurred over this period while a further 1 million are living with HIV. A further 700 people are estimated to be dying of AIDS every week (NACP Annual Report, 1996). Trends in AIDS cases however still give us an idea of the course of the epidemic. The AIDS case rate per 100,000 people continues to show an apparent steep upward trend in Bulawayo while it seems to be showing a slight downward trend in Harare (Fig. 10).

**Fig. 10. AIDS Case Rates by City and Nation: 1985 - 1995**

AIDS cases rate per 100,000



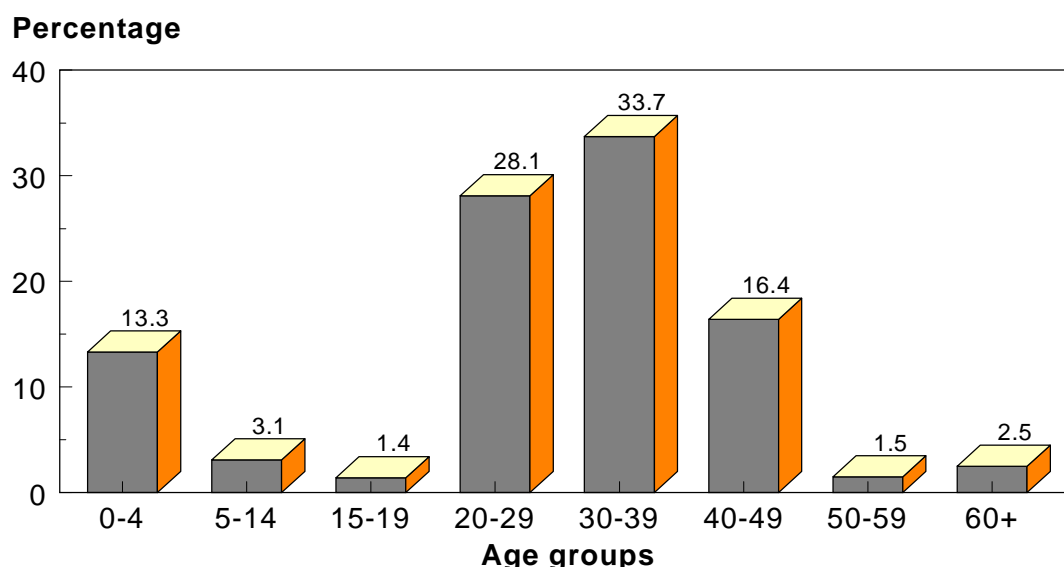
Year	1992	1993	1994	1995	1996
HCH ■	182	178	143	133	114
BCH ◆	138	196	145	273	240
ZIM ★	79	85	95	115	101

Source: NACP Monitoring and Evaluation Unit Annual Report, 1996

#### 3.3.2 AIDS Case distribution by gender and age

The reported AIDS cases show a bi-modal age distribution that are in keeping with the major heterosexual transmission pattern seen in Zimbabwe (Fig. 11). More than 90% of reported AIDS cases are in the 0 to 4, 20 to 39 and 40 to 49 year age groups. Most of the under-five infections are thought to be a result of M-t-C transmission during pregnancy, in labour or from breast-feeding.

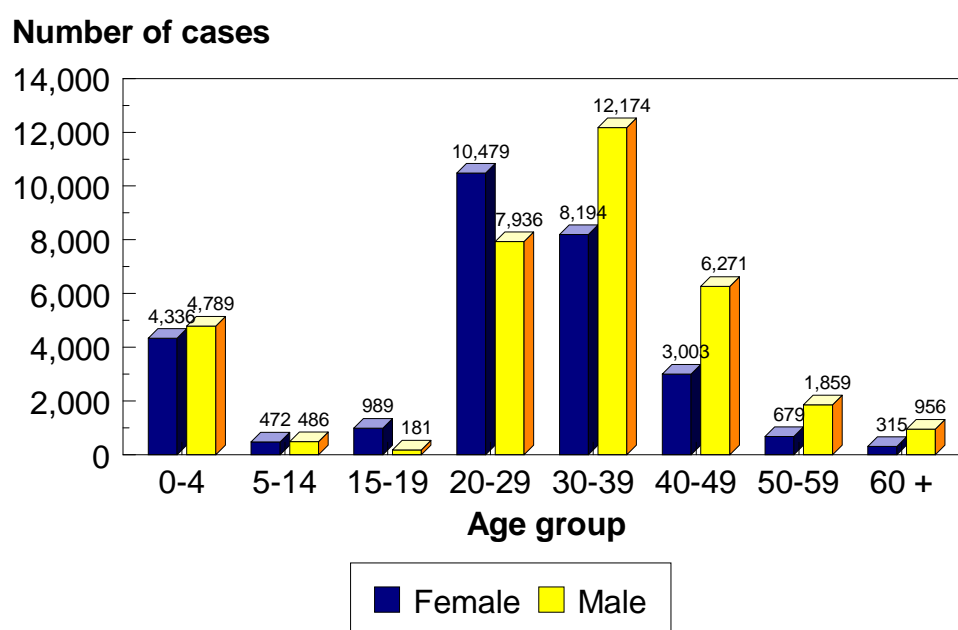
**Fig. 11. Percentage distribution of National AIDS Cases by age group: 1996**



Data Source: NACP Monitoring and Evaluation Unit Annual Report, 1996

The cumulative and yearly AIDS case data show that more male AIDS cases have been reported than females (123 males for each 100 females in the 1996 data). The male to female ratio changes across the age groups (Fig. 12). The proportions are almost equal in the age groups up to age 14. The greatest excess in the females cases is found in the 15 to 19 year age group, where female cases are excess by over 400% (female cases more than 5 times male cases). Many have attributed this to early sexual maturation of girls who then tend to have sexual intercourse with older men. The excess dramatically goes down in the 20 to 29 year age group, reversing in the 30 to 39 group where more male cases have been recorded than females. This trend continues with a slight increase in male cases right up to the 60+ year age group where female cases are 67% less than the males. The numbers then switch, with more males now presenting with AIDS in the 30 to 39, 40 to 49 and 60 and above year age groups. Fig. 12 gives the absolute contribution of national cumulative AIDS cases by age-group by sex.

**Fig. 12. Cumulative National AIDS Cases by age group by gender: 1987 - June 1997**



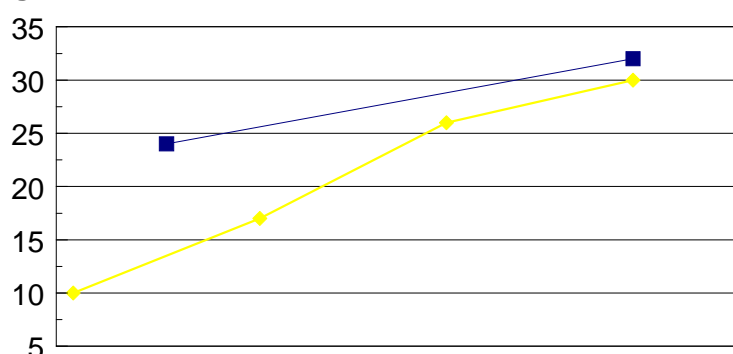
Data source: NACP Annual Report, 1997  
Re-calculated and graph drawn by author

### 3.3.3. HIV Sentinel Surveillance

Since reported AIDS cases only provide an incomplete picture of the HIV situation, HIV sentinel surveillance has been carried out by the Department of Epidemiology and Disease Control in conjunction with NACP since 1989. The target group includes women attending antenatal clinics. The surveillance has however not been consistently done due to logistic and technical problems. From the sparse results available for Harare, Chitungwiza and Bulawayo, HIV sero-prevalence has gone up from 10% in Bulawayo in 1989 to 30% in 1995 while Harare levels have gone up from 24% in 1990 to 32% in 1995 (Fig. 13). The only available results for Chitungwiza were 29% for 1992. It would be expected from these results that about 30% of pregnant women in the 3 urban areas are HIV positive, with the proportion still increasing at a yet unknown rate.

**Fig. 13. ANC Sero-Prevalence by City: 1989 - 1996**

Percentage ANC HIV+



Data Source: NACP Monitoring and Evaluation Unit Report, 1996

Graph drawn by author

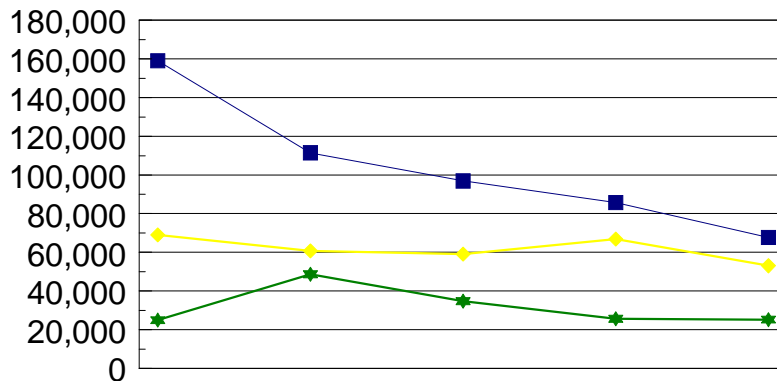
### 3.3.3. Epidemiology of Sexually Transmitted Infections

Sexually transmitted infections (STIs) are known co-factors for HIV transmission. It is therefore important to understand their epidemiology and how they relate to the occurrence of HIV/AIDS. Harare has seen an almost 60% reduction in STI episodes between 1992 and 1996 while Chitungwiza episodes have gone down by almost 50% between 1993 and 1996 (Fig. 14). Bulawayo STI episodes have marginally gone down over the 4 years. This may be the beginning of the turning point in STI and subsequently HIV transmission. The absolute numbers of episodes are however still relatively very high and more needs to be done to reduce them further. It is however worrying to note that STI episodes have gone up, albeit insignificantly or not at all, in all other Provinces (NACP Monitoring and Evaluation Annual Report, 1996).

The most common STIs in Zimbabwe are chancroid, syphilis and gonorrhoea. In Harare, 7% of antenatal patients were found to have gonorrhoea (Loewenson et al, 1994). Fewer women seek treatment than men because STI infection in them tends to be asymptomatic and they are embarrassed to seek treatment from the potentially judgmental health workers. An estimated 40% - 60% females with STIs are not treated compared to 20% - 40% among men (Latif, et al, 1994).

**Fig. 14. STI Episodes by City: 1992 - 1996**

Number of cases



Year	1992	1993	1994	1995	1996
HCH	159,083	111,482	96,913	85,789	67,682
BCH	69,030	60,751	59,127	66,852	53,047
CMH	24,929	48,701	34,721	25,701	25,247

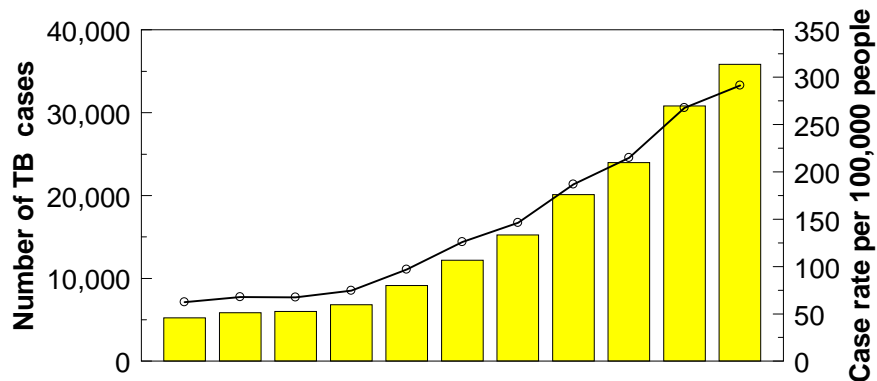
Data Source: NACP Monitoring and Evaluation Unit Annual Report, 1996

Graph drawn by author

### 3.3.4. Epidemiology of Tuberculosis

Tuberculosis (TB) is one of the HIV/AIDS related conditions. Fig. 15 shows a 6 fold increase in new TB cases since 1989. This has mainly been attributed to the concomitant HIV/AIDS epidemic.

**Fig. 15. Zimbabwe new TB cases and rates: 1986 - 1996**

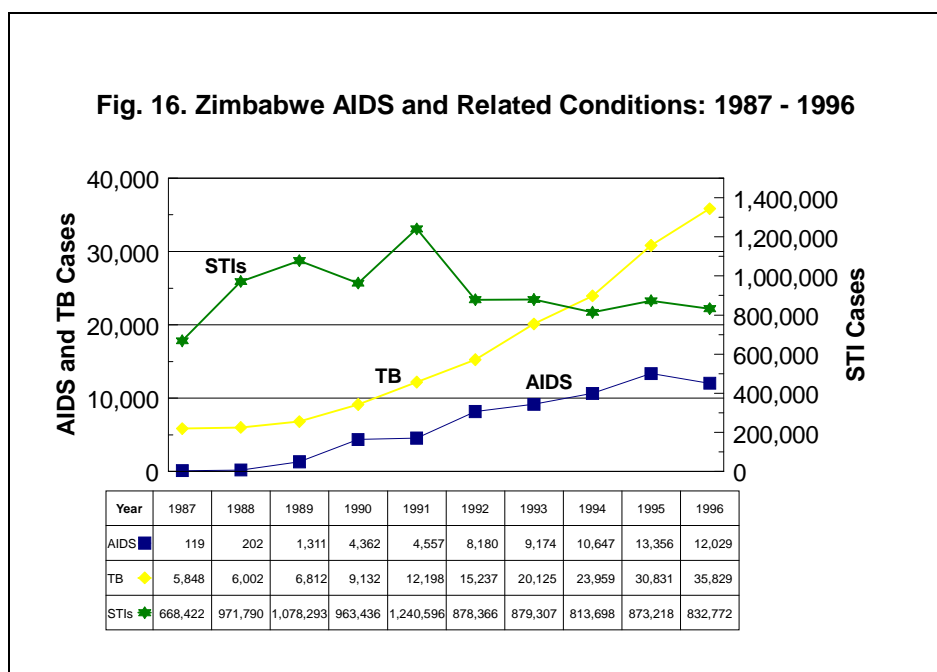


**\*\* Case Rate rounded to nearest integer**

Source: Zimbabwe National Health Profile, 1995

### 3.3.5. HIV/AIDS and related conditions

Fig. 16 gives a summary of the relationship between AIDS and the related conditions TB and STIs. Of greatest note is the parallel AIDS and TB epidemics clearly demonstrated by the graph, and the ray of hope indicated by the stabilising STI episode rates at national level. They are actually decreasing in Harare and Chitungwiza.



Source: Zimbabwe National Health Profile, 1995

## 3.4. Antenatal Care Services

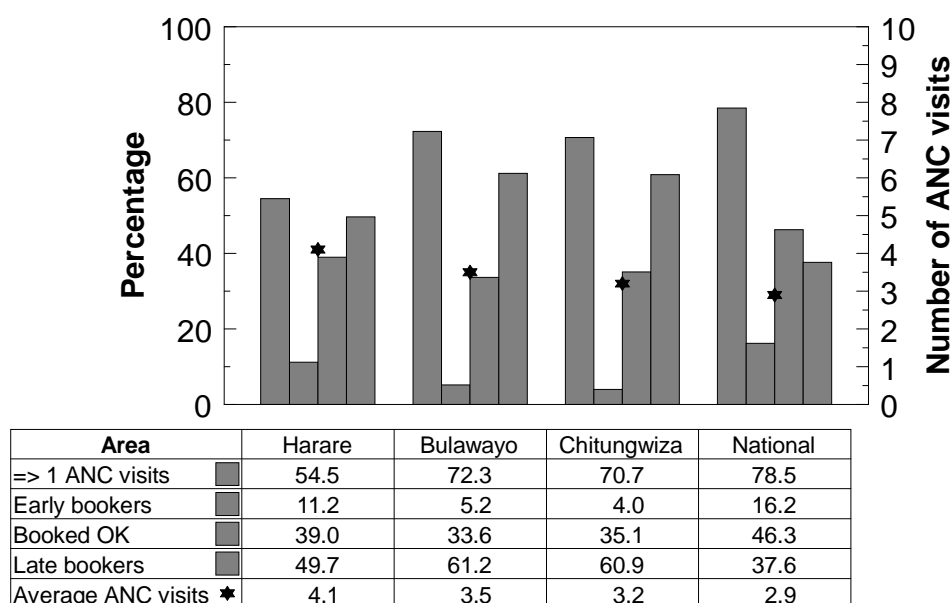
### 3.4.1. Access to Antenatal Care

The proportion of pregnant women who attend one or more Antenatal Care (ANC) visits, the gestation at booking and the number of ANC visits during the pregnancy can be used as a measure of access to ANC services. The first contact with the health services (first ANC visit) can provide the opportunity for a health worker to assess the pregnant mother and her foetus for risk factors as a step towards ensuring a healthy pregnancy outcome. The MTCT Project plans to recruit pregnant mothers at 36 weeks of gestation. Success of the project will depend on early presentation of pregnant women to ensure effective teaching and counselling.

Data from the pilot clinic sites was sparse, and therefore only data for the cities at large are presented. Harare City has the lowest 1<sup>st</sup> ANC attendance, at 55 %, while Bulawayo has the highest of the three, at 72% (Fig. 17). These figures are all below the national average. Very few patients also book early, with all the cities well below the national average of 16%. Chitungwiza is the worst performer with only 4% pregnant women booking before 16 weeks of gestation. Once pregnant women have booked, however, they return for antenatal care at least twice (Chitungwiza and Bulawayo) to four times (Harare).



**Fig. 17. Access to Antenatal Care in Cities and Nation, 1995**



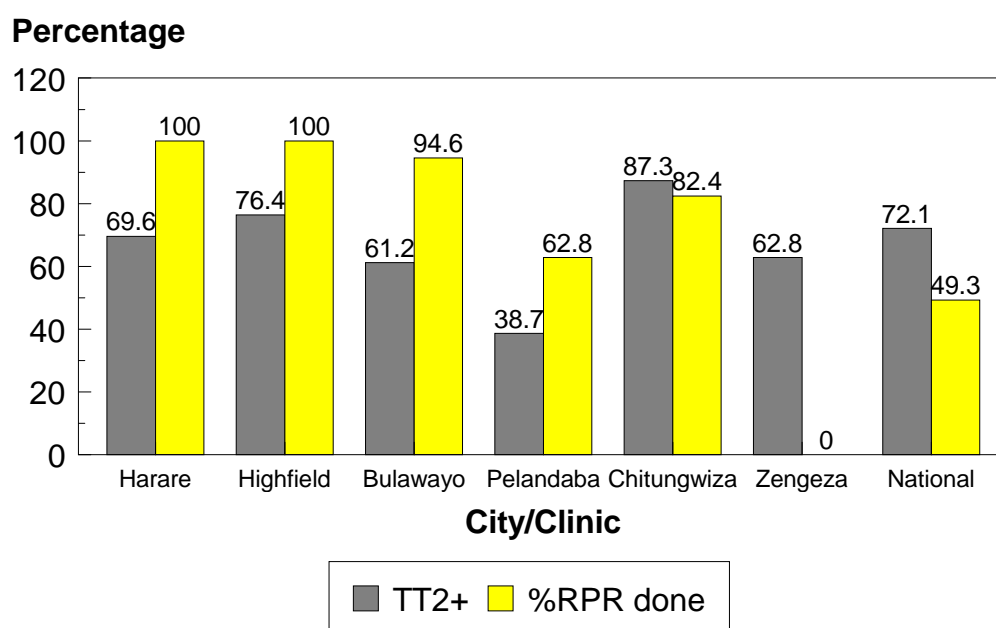
Source: Zimbabwe National Health Profile, 1995

Hindrances to ANC care mentioned by the Municipal Health Managers and clinic staff include financial, cultural issues and ignorance. Specifically, Chitungwiza charges Z\$250.00 for a pregnant mother to book (for ANC, delivery and post-natal care) with them, and will not accept instalments. Harare charges Z\$200.00 for the same service and also requires the lump sum to be paid at booking. Bulawayo City, which charges Z\$200.00, however allows patients to pay in instalments. The cultural belief that a pregnant woman should only tell other people that she is pregnant when it is obvious was mentioned in Bulawayo and Chitungwiza, and may be responsible for the under-utilisation of the ANC service. Some Managers also believed that pregnant women wait till they are sure they have a viable pregnancy before making it public. They would also like to ensure that they pay maternity charges for a viable pregnancy. Ignorance may also contribute as patients may not understand the importance of being screened for risk factors and the valuable advice available from the health workers, clinic staff claimed. Belief in traditional midwives and traditional healers when the previous pregnancy had problems, e.g. abortion, still birth, previous caesarean section, etc., may also be hindrances.

### 3.4.2. Quality of ANC

Measures of the quality of ANC services include availability of STI services in the form of counselling and screening for syphilis, tetanus toxoid inoculation, assessment of Haemoglobin (Hb) and nutritional status. TT2+ coverage (proportion of pregnant women who received the second or a later TT dose) is reasonable to very good in most cities and their clinics where it is more than 60% except for Pelandaba, with a coverage of only 38.7% (Fig. 18). Recorded RPR screening coverage was very good in all cities in general and Highfield Clinic. It was reasonable in Pelandaba (62.8%) but is not being performed at all in Zengeza Clinic due to unavailable laboratory personnel since 1996 even though there is a reasonably equipped laboratory.

**Fig. 18. Quality of ANC by City, Nation ('95) & Pilot site ('97)**



Source: City and national figures: Zimbabwe National Health Profile, 1995  
Clinic data: Highfield, Pelandaba and Zengeza clinic ANC data records

Referral guidelines developed in collaboration with referral Central Hospitals are used in all clinics for the detection and management of pregnancy complications. In pilot clinics, nurses, particularly the Registered General Nurses (RGNs, also called State Registered Nurses or SRN) screen pregnant women and refer to the doctor. In Pelandaba, the Medical Officer visits the clinic 3 times a week to see referred patients. In Zengeza, the visiting Medical Officer does not see pregnant mothers and nurses refer these to Chitungwiza Hospital. In Highfield, pregnant mothers with problems are seen by a Medical Officer who comes once a week, or nurses refer to Hospital in the absence of the medical officer.

In Zengeza 2 nurses man the ANC clinic on a typical day, seeing 80 patients who would leave around 3.00 p.m. A similar scenario was reported in Highfield clinic. Pelandaba staff however claimed that waiting time has been tremendously reduced by the introduction of an MCH corner such that mothers and children do not queue up with other patients, resulting in waiting time for ANC patients of about 1 hour.

### **3.4.3. Weaknesses and strengths of ANC services**

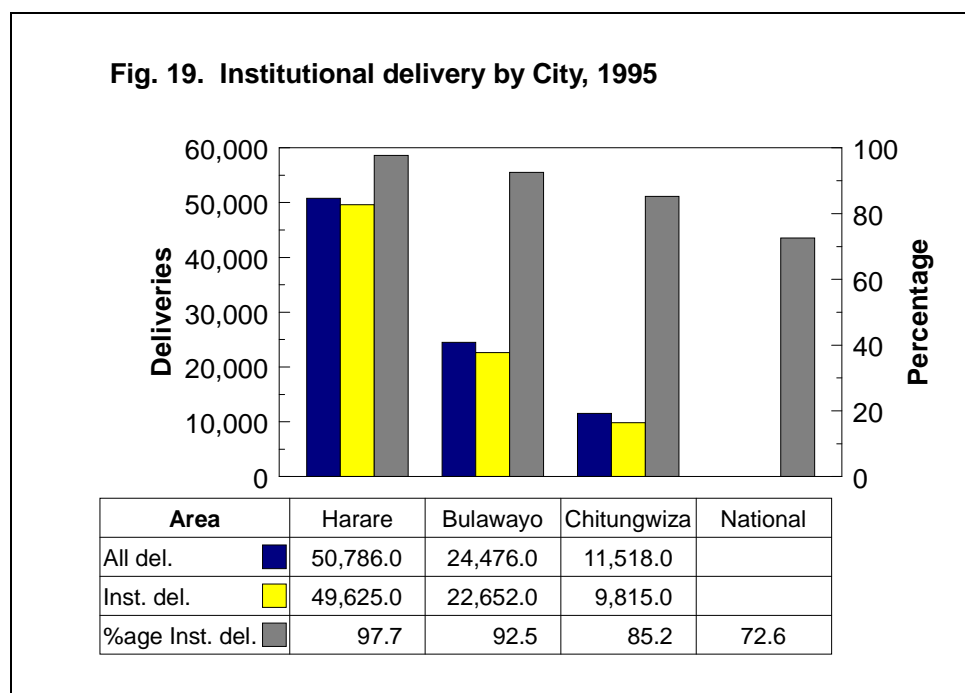
Bulawayo City (Pelandaba) believe they have an affordable high quality service within easy reach of all potential clients are some of their strengths. The short waiting times thanks to the establishment of the MCH corner is also a strength. An effective follow-up system for at risk mothers and children by the community sisters was also mentioned. Weaknesses include an ambulance service that sometimes does not collect patients in time, and the clinics' inability to provide food to admitted mothers. Zengeza on the other hand has a core of mature dedicated staff who are not very mobile. Shortage of manpower, high attrition as most of its old members retire with no replacement are some of the serious weaknesses. The absence of a social support network in the community to support HIV/AIDS patients does not make it any easier on the staff. The accessibility of the service for all mothers in Highfield, available community follow-up by the community sister were mentioned as strengths there.

All areas mentioned fees as obstacles. They all also mentioned the integrated or supermarket approach employed as an opportunity for improving the services.

## 3.5. Delivery Services

### 3.5.1. Place of delivery

Most deliveries in the 3 cities take place under the supervision of health workers in health institutions, with Chitungwiza having the lowest percentage of 85%, though this is still way above the national average of 73% (Fig. 19). The majority of prospective clients for reduction of M-t-C HIV transmission will therefore be easily accessible.

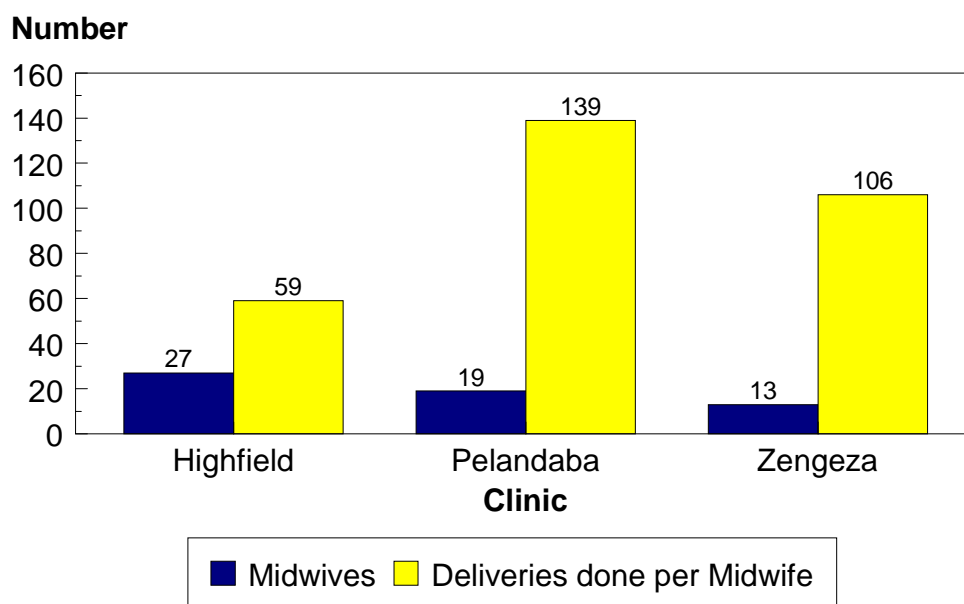


Data Source: Harare data - HCH Department Annual Report, 1995  
All others - Zimbabwe National Health Profile, 1995

### 3.5.2. Maternity Staffing levels and workload

Fig. 20 gives the number of trained midwives who provide delivery service in the proposed pilot clinic sites and the average deliveries by each midwife per year. Highfield has the largest staff complement and therefore lowest workload, while Pelandaba has the most workload. This is only a crude measure as the available staff are actually divided up between the various sections that have to be manned, labour ward being only a part of it. Managers and staff all emphasise the acute shortage of staff, necessitating the abandonment of some duties, like routine haemoglobin (Hb) testing which has to be performed only on patients who clinically look pale. General counselling of clients is also very inadequately done due to the shortage of staff and time.

**Fig. 20. Maternity staffing and workload by Clinic, 1997**



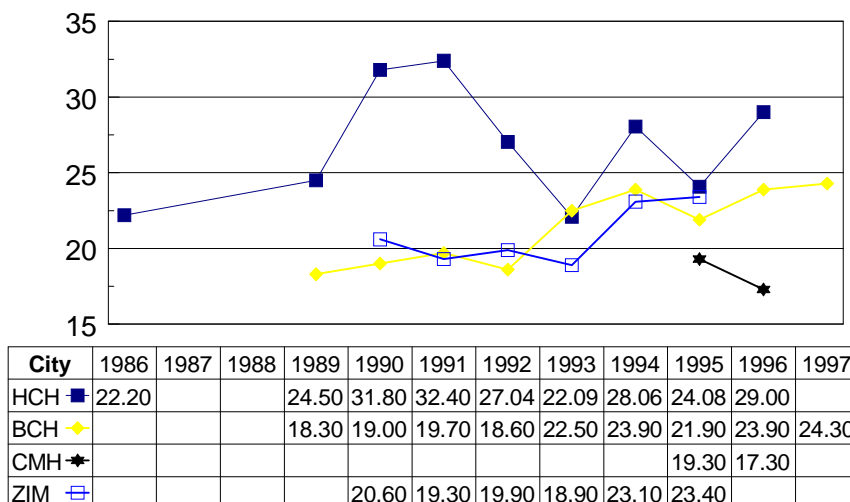
Source: Highfield Clinic maternity records  
Pelandaba Clinic maternity records  
Zengeza Clinic maternity records

### **3.5.3. Quality of Delivery Services**

One way of measuring the quality of delivery services is to measure the Still Birth Rate (SBR). It is actually a known good indicator of quality of antenatal care and care during delivery. The only national figures available are hospital based ones, and these have gone up by about 10% from 20.6 to 23.4 per 1,000 births between 1990 and 1995 (Fig. 21). The city figures are also facility-based, but may be more accurate as reporting of deaths is expected to be more complete in the cities. They have followed a similar upward trend to the national figures, going up by about 30% since 1985. Harare SBRs have gone up from 22.2 per 1,000 live births in 1985 to 29/1,000 live births in 1996, while Bulawayo rates have steadily increased from 18.3 per 1,000 live births in 1989 to 24.3 per 1,000 in 1997. In general therefore, we could say antenatal care and care in labour have deteriorated over the years, with the most noticeable change occurring in the AIDS epidemic era, suggesting a significant contribution to still births, though other factors like ESAP should not be ignored.

**Fig. 21. Still Birth Rates by City, 1986 - 97**

deaths per 1,000 births



Source: Harare City Health data: HCH Department Annual Reports (1985 - 1996)

Bulawayo City Health (BCH) data: BCH Annual Reports, 1984, 1995

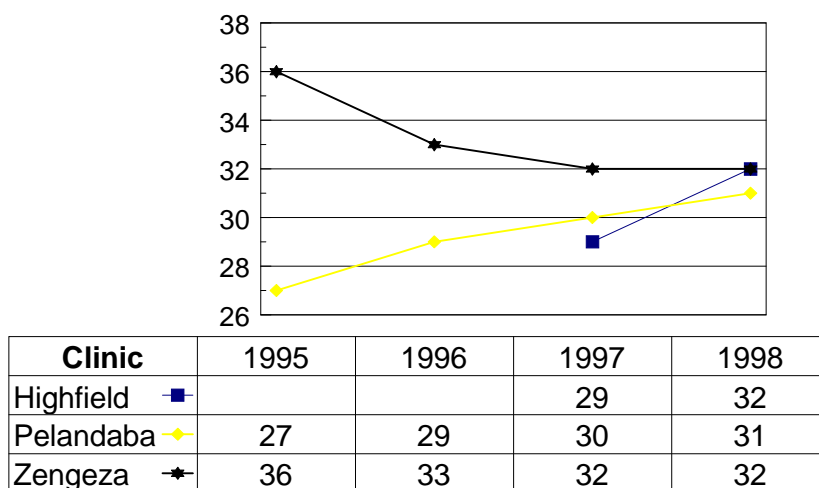
Chitungwiza Municipal Health (CMH) data: CMH Annual Reports, 1995-96

National (ZIM) data: Zimbabwe National Health Profile, 1995

Staff trends in both Pelandaba and Highfield are positive, even though the general feeling is that the available staff are still very inadequate. Zengeza has however not seen replacement of retiring staff, a situation that has seen the staff complement continuously shrinking even though workload is increasing.

**Fig. 22. Trends of nurses by clinic by year, 1995 - 98**

Number of nurses



Source: Highfield, Pelandaba and Zengeza clinic staff records

In-service training has been conducted in infection control for nurses in Harare, while a manual is available in all clinics in Bulawayo. All clinics however have an infection control nurse who co-ordinates and helps ensure compliance with universal precautions.

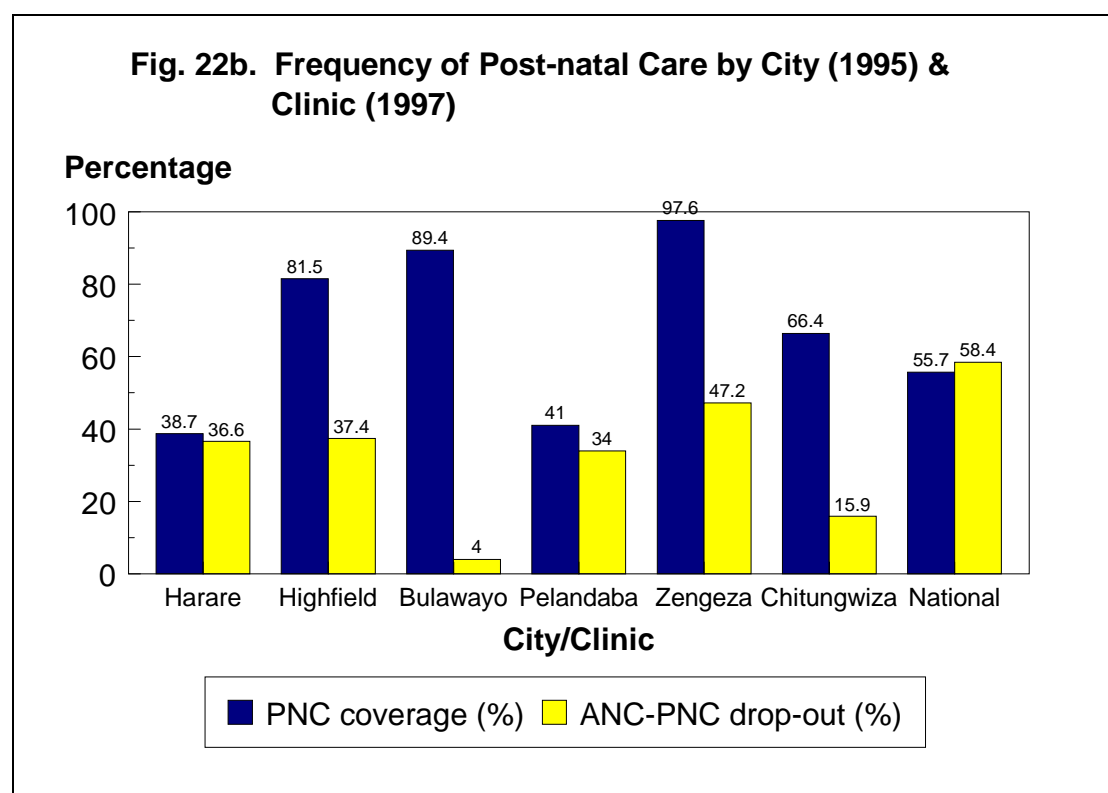
Availability of gloves was considered adequate in all clinics. Rubber boots and aprons are shared in Pelandaba. Containers for safe disposal of sharp instruments ('sharps boxes') fill up too quickly and become unavailable as nurses prefer discarding syringes and needles in the containers meant for sharp instruments only. A suggestion was made that larger 'sharps boxes' be made available. Zengeza experiences shortage of gloves though it has not been necessary to deliver with bare hands yet. As in Pelandaba, 'sharps boxes' fill in quickly as both the syringe and needle are disposed therein, and cardboard boxes are then used for the disposal of sharps, a practice that exposes staff to preventable HIV transmission. Rubber boots are very inadequate and are therefore not used at all. Plastic aprons and gowns are however adequate. Harare has no shortages of the above-mentioned items.

Invasive procedures carried out by clinic staff include artificial rupture of membranes (ARM), episiotomies and repair of vaginal tears.

### 3.6. Post-natal Care services

#### 3.6.1. Accessibility of Post-natal services

Available data for 1995 indicate a very high PNC coverage for Highfield clinic but a very low coverage for Harare at large of 38.7% (Fig. 22). Bulawayo City had a very high coverage while its clinic, Pelandaba, had a low coverage. Chitungwiza and its clinic had reasonable coverages. Bulawayo City had the lowest ANC - PNC dropout rate at only 4%, while significant dropouts were recorded in the other Pelandaba and the other cities and their clinics. This is despite the availability of community nurses in Highfield clinic and Pelandaba to follow-up problem patients. It becomes an area of great concern as a third of patients put on anti-retroviral (ARV) drugs may be lost to follow-up after discharge at delivery.



Source: City data - Zimbabwe National Health Profile, 1995  
Clinic data - Highfield, Pelandaba and Zengeza clinic maternity records

### 3.6.2. *Infant feeding patterns*

Most clients breast feed their babies. Formula feeding is very rare, according to the community nurses interviewed because it is a strong cultural practice apart from the strong breast feeding lobby spearheaded by the Ministry of Health and Child Welfare over the last few years. It was also reported that most mothers supplement with porridge.

Formula milk is available in all the urban areas. Most mothers from the clinic catchment areas are of a low socio-economic level and most would not be able to afford the high cost of formula milk. Stories were narrated of how senior clinic staff from Pelandaba and Highfield have had to provided formula milk to HIV positive mothers advised to stop breast feeding by doctors in the Central Hospitals. The clinic catchment areas in question however all have access to safe piped water which would improve the safety of prepared formula. General level of hygiene may also be adequate considering the success in use of home prepared oral re-hydration solution (ORS) in the country.

### 3.6.3. *Health Worker training in taking care of infants and supporting mothers*

None of staff from the 3 pilot clinics have received specific HIV/AIDS training on taking care of infants and supporting mothers. Highfield is a certified baby-friendly clinics and 53% of their 32 nurses have been trained. Sixteen percent of nurses at Pelandaba clinic are trained, while only 2 (6%) of Zengeza clinic nurses are trained.

## 3.7. Family Planning Services

### 3.7.1. *Access to Family Planning Services*

Zimbabwe's contraceptive user rates are reported to be as high as 48% for all methods and 42% for modern methods, giving some of the highest rates in sub-Saharan Africa (World Population Data Sheet, 1997). Contraception is to a large extent pill based, contributing about half of the Couple Years of Protection (CYP) in Bulawayo and Chitungwiza and 75% in Harare City (Table 5). Condoms contribute around 15% CYP in all cities. Specific data on types of contraceptives used during the post-partum period and by HIV positive (HIV+) women is however not available.

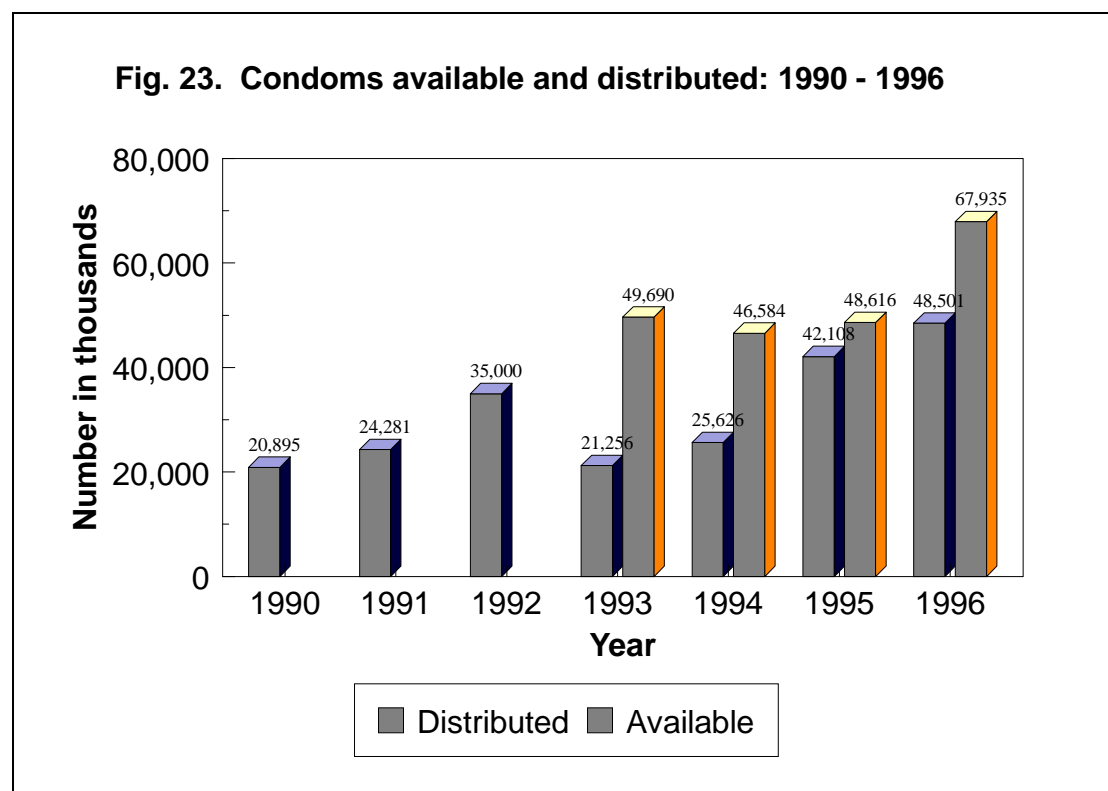
**Table 5. Methods of contraception by City: 1995**

Method	Conver sion factor	Harare City		Chitungwiza City		Bulawayo City		National	
		Number issued	CYP (%)	Number issued	CYP (%)	Number issued	CYP (%)	Number issued	CYP (%)
Oral Pills	0.077	593229	75.2	64404	50.6	168057	51.9	4646546	66.6
Condoms	0.011	896872	16.2	117314	13.1	348179	15.3	7028178	14.4
Injectables	0.250	202191	8.4	9866	25.2	24986	25.1	332062	15.5
IUDs	2.500	0	0.0	38	1.0	294	3.0	2481	1.2
Sterilisation	7.500	186	0.3	131	10.0	155	4.7	1866	2.4

Source: Zimbabwe National Health Profile (ZNFPC)

Since condoms provide protection from sexual transmission of HIV, there is merit in increasing their utilisation rates. The recent introduction of the female condom may help in this regard. Condoms however have to be available in adequate quantities in easily accessible places. Numbers of condoms available from public health facilities (including city health and ZNFPC) and distributed are useful though crude indicators. National figures show availability and distribution rising over the years (Fig. 23). There is

however a significant gap between availability and distribution as 27% of the condoms made available were actually not distributed.



Source: Zimbabwe National Health Profile, 1995

### 3.7.2. Condom and contraceptive availability

The major public health suppliers of most forms of contraceptives in the 3 cities and their pilot areas are then City Health facilities. Other suppliers are private practitioners and private pharmacies, ZNFPC to a limited extent and urban hospitals. Health promoters in Bulawayo and Harare however also distribute the male condom in the community. Clients have to pay for contraceptives like the pill, although they are cheap and affordable even for clients in the low income brackets. Condoms supplied by the public health facilities including City Health facilities are free of charge. They are however sold in pharmacies, and are generally not very affordable for most clients in the pilot areas.

In a recent male condom survey conducted in Chitungwiza among males and females, the latter of whom accounted for 46% of the sample of 801, the majority agreed that these were easily available (73.9%).

### 3.7.3. Integration of services

The STI services and family planning are well integrated in all the pilot sites as they all practise the supermarket approach. Most nurses providing ANC, delivery and PNC services, STI treatment and counselling services are trained in family planning. For example, 65% of the nurses in Zengeza and 56% of those in Highfield are trained, though only 26% are trained in Pelandaba. Nurses in Family Health sections providing FP services also provide the other services, though many of them are not trained. Of the 5 in Highfield, only 1 nurse each is trained in STI management and Counselling respectively. None of the 5 in Zengeza is trained in STI management while 1 underwent training as a counsellor.



## 3.8. Voluntary Counselling and Testing Services

### 3.8.1. Availability of VCT Services

Harare is the only city that has instituted a VCT service recently (Genito-Urinary Centre), though use was reported to be very minimal. Services are available in Harare and Bulawayo from the Blood Transfusion Services, the Public Health Laboratory (PHL) through Private practitioners. The only Aids Service Organisations (ASOs) that are offering services are Mashambazhou in Harare (Waterfalls) and Matabeleland Aids Council (MAC) in Bulawayo (City Centre). All services offered are not very accessible to clients from the clinic catchment areas as they are based in town centres or other inaccessible areas.

Highfield (Harare) and Pelandaba (Bulawayo) only offer testing on clinical grounds, though very few test actually get done. When the nurse in Pelandaba has clinical suspicion and decide there is need for an HIV test, either s/he or one of the counsellors counsels the client, and blood for the test is taken and sent to the PHL via the City Health messenger service. It usually takes a week to get the results back, after which post-test counselling is performed, if the client comes back of course. Clients are not followed up in their homes. In Highfield, a doctor decides on the need for testing, gets one of the nurse counsellors to counsel the patient, then orders a test. It also takes about a week for results to be available, and post-testing counselling is then conducted by one of the counsellors.

### 3.8.2. Level of staff training in HIV/AIDS and VCT

Very few nurses have received training in STIs, including HIV/AIDS, while a few more have been trained as counsellors (Table 6). Close to half of the Pelandaba and Zengeza nurses are actually trained counsellors. Most of the clinic staff were as a result requesting training before they can be asked to implement this type of project.

**Table 6. STI and Counselling training among clinic staff**

Clinic	Attended Training Course (% in brackets)		Total nurses
	STI training	Counselling course	
Highfield	7 (22%)	4 (13%)	32
Pelandaba	3 (10%)	15 (48%)	31
Zengeza	4 (13%)	13 (41%)	32

Source: Nurse training clinic record - Highfield, Pelandaba and Zengeza clinics

### 3.8.3. Attitudes of Health workers to HIV infected individuals

All Health and Clinic Managers claimed that health care workers (HCW) do not discriminate HIV infected individuals. Some felt that HCW actually tend to show pity towards the individuals and are very supportive. Most take precautions when there is a risk of exposure to HIV from all individuals regardless of their HIV status. HCW were however not interviewed themselves.

### 3.8.4. Invasive procedures and exposure to blood products

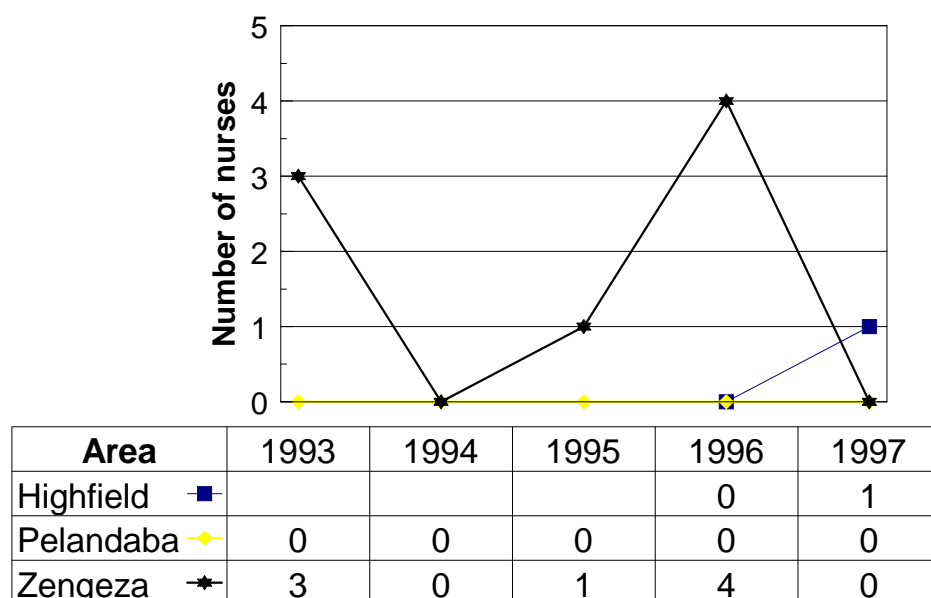
Invasive procedures carried out include episiotomies and ARM. No blood transfusions are given in the clinics. All procedures like amniocentesis and the giving of blood transfusions are performed at the referral hospitals.

### 3.8.5. Exposure of Health workers to HIV

Most HCW do carry out procedures that could expose them to HIV infection. They perform venepunctures to obtain blood for the various tests like Hb and RPR that have to be done during pregnancy. Exposure is also possible during delivery, especially if they perform an episiotomy or the patient has a tear that requires suturing. A review of records of deliveries performed in February 1998 showed that episiotomies and tears are sutured in a large proportion of deliveries, 35% in Highfield and 15% in Zengeza.

Fig. 24 gives yearly reported needle stick injuries in the three clinics between 1994 and now. These are reportable and are recorded in an Injury on Duty book. None had been reported in Pelandaba. One staff member remarked that many do not report these types of injuries as they are requested to submit blood for HIV testing just after and some time later to ensure they were not infected during the injury, and most fear that they may be found positive, a situation many are not prepared to deal with. Highfield records before 1996 were not available. It is therefore clear that HCW are being exposed through sharp instruments possibly infected with HIV, but possibly many do not report it for fear of being tested for HIV.

**Fig. 24. HCW sharp instrument injuries by year, 1993-97**



Source: Injury on Duty Report books: Highfield, Pelandaba and Zengeza clinics

### 3.8.6. ARV drug availability and medical/laboratory monitoring skills

Anti-retroviral drugs are not presently available in any of the City Medical Services, let alone the pilot site clinics. Some senior Medical Managers made it very clear that the City Councils would not be able to afford them as their budgets are already overstretched, and they are actually off loading services that the private sector can take over. There is acute shortage of Medical Officers, and they can only visit clinics once a week in Chitungwiza and Harare and three times a week in Bulawayo. Almost all clinical work involving care during ANC, in labour and post-natally is performed by the clinic nurses who may not have the skills to monitor anti-retroviral drug therapy.

Laboratory monitoring facilities and skills are also in short supply. The laboratories in Highfield and Chitungwiza are single rooms that are only equipped to carry out basic tests done during ANC, delivery and PNC, limited to Hb, RPR and urine microscopy to a large extent. Pelandaba has no on-site laboratory,

but even the one available in Khami Road Clinic also only performs basic investigations. The two operational laboratories (Highfield and Khami Road) are manned by one laboratory technician who is already swamped by the tests to be performed for patients from many other clinics.

### ***3.8.7. VCT reference centres***

None of the clinic sites have reference centres on site or in their vicinity. These are either in the City Centres or inaccessible places for the area in the example of Highfield (Mashambazhou in Waterfalls). MAC in Bulawayo, who are prepared to take a few clients for counselling, will only take the patients if they are referred to their centre. The same goes for Mashambazhou in Harare. These organisations have very little extra capacity for counselling due to shortage of manpower (Mashambazhou Annual Report, 1995). No reference centres are actually available in Chitungwiza.

### ***3.8.8. Acceptability of VCT***

There is little information on this among pregnant women. The little information available from general patients at Pelandaba suggests that many clients do not return for the results after blood is taken. A review of their July to December 1997 counselling book records showed that 14 clients were advised to have the HIV test. Eleven of these attended counselling sessions and were tested, but only 2 of them returned for their results. Ten of the 11 results were actually HIV positive. This either suggests that the counselling was of low quality, or the clients, like the HCW mentioned earlier one, could not cope with the possibility of their being HIV positive and preferred ignorance instead.

### ***3.8.9. Capacity for providing VCT services***

All interviewed HCW and Health Managers were sure that this was close to nil in the health service itself. It was made very clear that the service is so overstretched at the moment that there is no room for adding any more responsibilities to the few doctors and the overworked nurses. Capacity may be available from outside the health service itself, and using churches, ASOs where possible and support organisations like People Living With HIV (PLWHIV). The capacity of most of these organisations is limited however.

## **3.9. Socio-cultural context of HIV/AIDS**

### ***3.9.1. KAP on HIV/AIDS***

Most studies have found knowledge on HIV/AIDS to be very high (AIDSCAP, 1997; Target Research, 1997; ZDHS, 1994). Over 85% of women who participated in the 1994 ZDHS had adequate knowledge of HIV. Preventive methods most commonly cited in the same survey by women were condoms (over 80%) followed by sticking to one sexual partner. The radio, television, health workers, friends and relatives, television and the church are sources of HIV/AIDS information commonly cited by women in reported (A. Makamure, 1993; Target Research, 1997 and; ZDHS, 1994). As indicated in Table 7, the radio is a very popular source, followed by health workers, friends/relatives, television and the church. The proportion of women reporting getting information from these sources have been increasing over the years, possibly indicating their increased impact over time. Note that the 1997 Zimbabwe Sexual Behaviour and Condom Use Survey (SBCUS), was a KAP survey involving 1,987 men aged 15-54 years and females aged 15-49 years reported. The study by A. Makamure was a small survey of 20 women attending ANC an urban clinic in Harare.

**Table 7. Summary of HIV/AIDS information sources for women 15-49 by study**

Sources	Study, sample size and percentage		
	Makamure, 1993 N=20	ZDHS, 1994 N=6,128	SBCUS, 1997 N=1,987
Radio	25%	64%	76%
Health workers	20%	36%	45%
Friends/relatives	5%	36%	43%
Television	20%	26%	37%
The church	0%	9%	12%

**3.9.2. Attitudes towards condom use**

Condoms are considered taboo for women, and most will not carry them on their person of prejudice (Target Research, 1997). A. Makamure however found that 8 of 20 antenatal mothers surveyed claimed their husbands used condoms. The 1994 ZDHS found that 21% had ever used condoms compared to 23% in the SCBUS. However, only 2.3% of currently married women were currently using condoms according to the 1994 ZDHS. In the Chitungwiza condom survey, 28% of all respondents (N=801) agreed that they used condoms with their husbands/wives (Chitungwiza, 1997). This suggests that the use of condoms may be increasing even among married couples who believe they are at risk of contracting HIV. Outside of marriage, the SBCUS found that 90% of women expected their partners (casual or regular) to assist them when required. Women however felt unable to ask for the man to wear a condom if they were receiving assistance from him.

**3.9.3. Traditional social and care support mechanisms**

The extended family setting has always provided social and care support especially in time of need. The rapid breakdown in this institution especially in the urban areas has resulted in a vacuum in terms of social and care support. The harsh economic conditions that the country is going through have not made matters any easier as families which may be failing to meet their own needs and obligations become more and more reluctant to offer support to members of the extended family. Social support organisations are to a large extent non-existent to take over the void left by the crumbling extended family.

**3.9.4. Religious organisations attitudes**

The attitude of many religious organisations have changed over the years. A number of them are now offering support and care to those affected by HIV/AIDS. Some, like the Zimbabwe Council of Churches (ZCC), CADEC, Samaritans, and churches like Seventh Day Adventists (SDA) have actually established counselling services persons with HIV/AIDS and provide support beyond the spiritual care that they are better know for.

**3.9.8. Community mobilisation for intervention support**

Most communities are not mobilised at the moment. This would need to be done to try and reverse the lethargy and hopelessness created by the HIV/AIDS message that has been preached for some time which gave the impression that was no hope.

**3.9.9. Interested groups**

It will be critical to involve church organisations within the catchment area of interest, politicians like the councillors and local senior party officials. They could be most helpful in achieving the needed community mobilisation.

### **3.10. Potential partnerships**

#### ***3.10.1. Available counsellors***

As mentioned in some of the earlier sections, it is possible to get counsellors from without the health service. Health workers were however fearful of confidentiality being compromised if community members are brought in to counsel. They however felt that ASOs and organisations like CADEC, ZCC could be brought in. MAC in Bulawayo is actually prepared to provide follow-up to 5-10 clients per month. Other organisations suggested include the Samaritans and CONNECT, again in Bulawayo. Church organisations like SDA and Zimbabwe Assemblies of God Africa (ZAOGA) in Harare could be mobilised and asked to provide counsellors. ACT actually have a satellite office in Highfield, and this could be used to provide counsellors (ACT Annual Report, 1995). Assistance could also be sought from Mashambazhou who are based in nearby Waterfalls. Chitungwiza however has no known ASOs, but again church organisations could be mobilised to provide counsellors.

Training of these counsellors would however need to be done, and NACP, CONNECT and ASOs involved in training counsellors could be brought in. There is need to standardise counselling training, and NACP in the process of producing a training manual that could speed this up.

#### ***3.10.2. Home care and support providers***

There is a paucity of home care and support group providers. A community based care programme is however provided by groups co-ordinated by the community health sisters in Highfield and Pelandaba. These may need to be supported more and they may benefit from networking especially with church organisations mentioned earlier.

#### ***3.10.3. Medical care and Social support***

The municipal clinics all refer patients to the central hospitals in their cities. Pelandaba and Highfield have visiting doctors who could provide some of the medical care, but due to shortage of staff, patients may need to be referred to the central hospitals

#### ***3.10.4. Orphan care support***

Success of the project would result in an increase in the number of AIDS orphans. Few orphans would be able to get support due to the collapse of the traditional extended family and current economic problems. It would therefore be necessary for support organisations to take in some of these orphans. Bulawayo has Revival for Hope and Hope In Child Through Christ, organisations that can take care of orphans. Harare has Chinyaradzo Children Home Mashambazhou. Mashambazhou is also available in Chitungwiza.

It will be necessary to involve these organisations at an early stage of the project to ensure that they prepare themselves for the possible large numbers of orphans.

## 4. Summary and Conclusions

Birth rates have decreased significantly in Zimbabwe and particularly in the 3 cities where the pilot projects are being planned (4.4% in 1984 to 3.2% in 1996). Mortality, both crude and specific (PMR, IMR, MMR and SBR) also came down significantly in the early and mid-1980s, but have risen steeply since, in many instances showing a complete reversal of gains made soon after independence, partly as a result of HIV/AIDS epidemic. Causes of mortality have also changed in all age groups, with HIV/AIDS underlying conditions like respiratory infections, tuberculosis, etc. becoming more prominent.

Reported HIV/AIDS cases have risen dramatically from 119 in 1987 to 12,029 in 1996. The bi-modal distribution of reported AIDS cases peaking in the 0- and 30-39 year age groups supports the heterosexual nature of the Zimbabwean HIV/AIDS epidemic. The majority of under five year old HIV infections are therefore acquired by M-t-C transmission during pregnancy, labour and during breastfeeding. Antenatal sentinel HIV surveillance has shown a rise in ANC women HIV sero-prevalence from about 10% in 1989 to about 30% in 1995 in the 3 cities. Episodes of STIs, known co-factors in HIV transmission, have shown a reduction then stabilisation since 1992, though absolute numbers are still high. The TB epidemic resulting from the HIV/AIDS epidemic, is contributing to the high morbidity and mortality from HIV/AIDS.

Access to antenatal care and delivery care services is very high, though postnatal care needs improvement. The average 3 visits during ANC can be utilised to provide a high quality ANC care and should provide adequate opportunities to counsel mothers in time for VCCT and ARV therapy. The high proportion of supervised deliveries should also help with high access of the project to pregnant women. The reported high quality of care is a strength that could be emphasised on, though user charges still provide obstacles to access. Available community follow-up by 2 of 3 pilot clinic sites and integrated services are strengths and opportunities that could also be exploited in improving the service and ensure success of the project.

There is however low level of training in management of STIs/HIV/AIDS, counselling and infection control, and there will be need for training in these areas. Staff also conduct many procedures that expose them to HIV infection, and there will be need to reduce risk by reducing exposure opportunities.

The low percentages of mothers returning for postnatal care may provide impediments as clients may not return for follow-up. On the other hand, breastfeeding is almost universal and bottle feeding an exception. As breastfeeding is known to transmit HIV infection to the baby, the policy on it will need to be reviewed for HIV+ women to be allowed to use alternatives. As most mothers in the low socio-economic groups cannot afford formula, there will be need to consider assistance in this area. Training in care and support of HIV/AIDS babies and mothers is however inadequate in surveyed clinics and it will therefore need to be addressed in the project.

Access to family planning is very high, though it is mainly pill based with condoms being coming next. The integrated FP/STI services do present some useful opportunities that could be taken of advantage of to increase use, especially of condoms, among HIV+ and all other clients.

VCCT services are not available to pregnant mothers in the pilot site areas. It will therefore be necessary to set these up at the pilot sites. Capacity to counsel is also very limited and partnerships will need to be established to provide counsellors from the community. It is however expected that acceptability of VCCT will be high.

Laboratory facilities are inadequate for HIV testing and ARV laboratory monitoring. It will be necessary to provide some outside support. The shortage of financial resources to take over project costs, especially

drugs and testing as highlighted by the Municipal Health Departments should to be addressed in the project.

Community mobilisation is thought to be at a very low level, even though knowledge on HIV/AIDS is known to be very high. The collapse of the traditional family structures makes it difficult for taking care of orphans in particular. It will therefore be critical that partnerships with NGOs, ASOs, churches and other community organisations are established to ensure mothers get support from the community and their children are looked after if they should die.

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